CHAPTER

Direction for delivery system reform

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Chapter summary

Fundamental changes are needed in health care delivery in the United States. Although on average life expectancy is increasing and certain measures of health care outcomes are improving, there remains much room for improvement. Recent studies show that the U.S. health care system is not buying enough of the recommended care, is buying too much unnecessary care, and is paying prices that are very high, resulting in a system that costs significantly more per capita than in any other country. As a major payer, the Medicare program shares in these problems.

Medicare fills a critical role in our society—ensuring that the elderly and disabled have good access to medically necessary care. Along with that role comes a responsibility to make sure the resources entrusted to the program by taxpayers and beneficiaries are used wisely. Without change, the Medicare program is fiscally unsustainable over the long term. Moderating projected spending trends requires fundamental reforms in the payment and delivery systems to improve quality, better

In this chapter

- Why is fundamental change needed?
- How should reform proposals be evaluated?
- Direction for delivery system reform

coordinate care, and reduce cost growth. What direction should those reforms take?

Medicare reforms should increase value, which means maintaining or increasing access to care, quality, and equity while controlling resource use. As the Commission has explored what prevents the Medicare program from increasing value, it has determined that, to be effective, reforms need to:

- promote accountability and care coordination,
- create better information and tools to use it,
- change providers' incentives to encourage efficiency and higher quality rather than increases in volume, and
- set accurate payment rates.

Reforms should also protect beneficiaries from the catastrophic costs of needed care and promote alignment with the private sector to make policies more effective while monitoring the burden on providers.

In previous reports, the Commission has recommended that Medicare adopt tools to increase efficiency and improve quality within current Medicare payment systems. These tools include:

- encouraging the use of comparative-effectiveness information,
- linking payment to quality,
- measuring resource use and providing feedback, and
- improving payment accuracy.

However, in the current Medicare fee-for-service payment system environment, the benefit of these tools is limited for two reasons. First, they may not be able to overcome the strong incentives inherent in any feefor-service system to increase volume. Second, paying for each individual service and staying within current payment system "silos" (e.g., the physician fee schedule or the inpatient prospective payment system) inhibits changes in the delivery system that might result in better coordination across services and lead to efficiencies or better quality across these systems.

To increase value for beneficiaries and taxpayers, the Medicare program must overcome the limitations of its current payment systems. A reformed Medicare payment system would pay for care that spans across provider types and time (encompassing multiple patient visits and procedures) and would hold providers accountable for the quality of that care and the resources used to provide it. This new direction would create payment system incentives for providers that reward value and encourage closer provider integration, which would maximize the potential of tools such as pay for performance and resource measurement to improve quality and efficiency. We introduce three concepts that may move the delivery system in the desired direction:

- medical homes
- bundled payments
- accountable care organizations

The first two of these concepts are developed further in Chapters 2 and 4, and the last one will be developed in future work.

These changes could be complemented by changes to medical education programs to encourage adequate geriatric training, teamwork, primary care, and quality training as well as adoption of innovative production technologies such as process reengineering.

As these concepts and other payment system reforms are developed, several fundamental issues must be addressed:

- How can incentives at the individual physician, group, and joint physician and hospital level be coordinated to obtain the best value for the Medicare program?
- What responsibilities do beneficiaries have? Should cost sharing be designed to motivate patients to use certain providers?

Is changing the financial incentives enough, or should society demand greater influence over what types of specialty training physicians receive and place tighter restrictions on which facilities and equipment physicians both own and refer their patients to?

These issues will play a major role in determining how far and how fast reform can progress. We need to start the process of reform as soon as possible, even though the final destination is unknowable and years in the future. ■

Why is fundamental change needed?

Fundamental changes are needed in health care delivery in the United States. Although on average life expectancy is increasing and certain measures of health care outcomes are improving, there remains much room for improvement. Recent studies show that the U.S. health care system is not buying enough of the recommended care (McGlynn et al. 2003), is buying too much unnecessary care (Fisher et al. 2003a, Fisher et al. 2003b, Wennberg et al. 2002), and is paying prices that are very high (Anderson et al. 2006, Anderson et al. 2003), resulting in a system that costs significantly more per capita than in any other country. As a major payer, the Medicare program shares in these problems.²

Several recent studies show serious quality problems in the American health care system. One study showed that participants received about half (55 percent) of the recommended care across types of care (preventive, acute, chronic) and functions (screening, diagnosis, treatment, follow-up). It found greater variation across conditions; for example, 79 percent received the recommended care for senile cataract, but only 11 percent received it for alcohol dependence (McGlynn et al. 2003). This variation across conditions could reflect incentives in the payment systems and cost sharing or a lack of agreement among clinicians on what constitutes appropriate care. Another study shows wide variation across states in hospital admissions for ambulatory-care-sensitive conditions (i.e., admissions that are potentially preventable with improved ambulatory care) (Schoen et al. 2006).

At the same time that Americans are not receiving enough of the recommended care, they may be receiving too much ineffective care. For 30 years, researchers at Dartmouth's Center for the Evaluative Clinical Sciences have documented the wide variation across the United States in Medicare spending and rates of service use. For example, they find that rates of use for certain kinds of care, referred to as supply-sensitive services (i.e., use is likely driven by a geographic area's supply of specialists and technology), differ greatly from one region to another (Wennberg et al. 2002). The higher rates of use are often not associated with better outcomes or quality and instead suggest inefficiencies. In fact, a recent analysis shows at the state level that no relationship exists between health care spending per capita and mortality amenable to medical care, that an inverse relationship exists between spending and rankings on quality of care, and that high

correlations exist between spending and both preventable hospitalizations and hospitalizations for ambulatorycare-sensitive conditions (Davis and Schoen 2007). These findings point to inefficient spending patterns and opportunities for improvement.

Medicare has some control over pricing (i.e., the rates it sets administratively for health care services) but much less control over getting recommended care or avoiding unnecessary care. Fee-for-service (FFS) payment systems encourage service volume growth regardless of the quality or appropriateness of care. Even if the payment rates in the systems were made as accurate as possible (the Commission has made many recommendations toward improving payment accuracy), the existing FFS payment systems will nevertheless reward providers who increase the volume of services they furnish. Because of this strong incentive for volume growth, a fundamental restructuring of Medicare payment systems toward quality and accountability is needed to improve the value of health care spending.

Another indicator that fundamental reform is needed is that providers who are recognized as being innovative and cost effective are not rewarded by FFS payment systems and can in fact be disadvantaged. For example, the Virginia Mason Medical Center in Washington state reported to the Commission that its lower back pain initiative greatly reduced insurance companies' cost for members with lower back pain but, under standard FFS payment rules, decreased the center's revenues (Kaplan 2006).

The Commission is not alone in concluding that fundamental change is needed in Medicare FFS payment systems and the way care is delivered.³ A recent survey of 214 health care leaders sponsored by the Commonwealth Fund found that 95 percent of those opinion leaders agree that fundamental payment reform is needed. They agree that delivery system reform is needed as well: Threefourths support fostering integrated delivery systems, and 73 percent support Medicare payment reform to promote medical homes. In addition, 90 percent favor Medicare mandating the use of electronic health records, and 47 percent think pay for performance (P4P) is an important transitional step (Shea et al. 2007).

In Crossing the Quality Chasm, the Institute of Medicine also concluded that "The American health care delivery system is in need of fundamental change" (IOM 2001). It set six aims for improvement, proposing that health care should be: safe, effective, patient centered, timely, efficient, and equitable. It pointed out that there were

Determinants of value in the Medicare program

Determinant

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Access	Beneficiaries need to be able to obtain care, and the care that is delivered should be appropriate.
Quality	Beneficiaries should receive care that is safe, effective, patient centered, and timely.
Resource use	Care should be provided efficiently; that is, it should produce a given quality outcome with the fewest inputs.
Equity	Payments should be adequate for the efficient provider and not make some services significantly more financially attractive than others. Out-of-pocket costs should not unduly burden particular classes of beneficiaries.

serious shortcomings in quality as well as the absence of real progress toward restructuring heath care systems to address both quality and cost concerns.

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How should reform proposals be evaluated?

To help analyze different approaches to payment and delivery system reform, the Commission has created a framework for evaluating reform proposals that sets the goal of reform as achieving value for the Medicare program and defines operational objectives for reform proposals to achieve.

The goal of reform should be to increase the value of the Medicare program to beneficiaries and taxpayers—that is, to improve the efficiency of health care delivery without lowering access or quality. The determinants of the program's value are access to care, quality of care, resource use, and equity (Table 1-1). These concepts are not mutually exclusive. For example, beneficiaries cannot receive high-quality care if they lack access to care. Similarly, access and equity are interrelated; if some services are overpaid relative to others, there may be

excessive provision of those services and lessened access to services that are relatively underpaid.

Policymakers can use these determinants of value to help assess the merits of reform proposals. For example, does a given proposal increase access or quality? Does it encourage efficient resource use and increase equity? Reform proposals should make these links explicit when possible, which will help policymakers judge how far a reform proposal moves toward the goal of improving value for the Medicare program.

In addition to the overall goal of improving value, it is also useful to set operational objectives that reform proposals should achieve. We derive these objectives from an analysis of the problems that prevent Medicare from achieving value in the current program.

Barriers to achieving value in Medicare

Medicare, as well as other public and private health care payers, faces fundamental problems that create barriers to getting the best value for its expenditures. In an ideal health care system, providers would be accountable for both the quality of the care they provide and the Medicare resources their patients use—even if those resources were provided by others. Providers would have the information they need to furnish better care and reduce or limit growth in resource use, Medicare administrators and policymakers would have sufficient data to create tools to give information to beneficiaries and providers in usable form and to formulate better policies, and beneficiaries would have the information they need to maintain a healthy lifestyle and to choose the highest quality care at the lowest cost. Payment rates would be accurate and send the right signals to providers about which services are of high value, and new technology would be used only when it generates outcomes of greater value than the alternatives. However, Medicare and the health care system nationwide fall dramatically short of this ideal.

Lack of accountability and care coordination

Fragmented delivery systems, lack of information, and perverse incentives are barriers to full accountability. Most providers have some degree of accountability for the care they furnish. They may provide quality care to uphold professional standards and to satisfy patients. In most instances, they may also want to control their own costs to improve their financial performance. But providers are not accountable for the full spectrum of care a beneficiary may use, even when they make the referrals that dictate resource use. For example, physicians ordering tests or

hospital discharge planners recommending post-acute care do not have to consider the financial implications of the care that other providers may furnish. This fragmentation of care puts both quality of care and efficiency at risk.

Beneficiaries may not be sufficiently accountable for the choices they make among providers or therapies because insurance may insulate them from the financial consequences of health care and lifestyle choices.

Finally, the Medicare program could do more to be accountable to beneficiaries, taxpayers, and the Congress for the program's value. Although the Medicare program has made important strides in becoming not just a payer of claims but a prudent purchaser (examples are the program's investment in developing and reporting quality measures and launching of demonstration programs to test P4P and care coordination), many payments do not reflect the true value of the service being bought. Duplicative tests or imaging, for example, may seldom add much value.

Lack of information and the tools to use it

Profound gaps in information on providers' costs and quality and appropriate clinical practices pose major barriers to fundamental health care reform. The program and its providers lack the information and tools needed to improve quality and use program resources efficiently. For example, Medicare lacks quality data from many settings of care, does not have timely cost or market data to set accurate prices, and does not report resource use back to providers. Individually, providers may have clinical data, but they may not have the information in electronic form, leaving them without an efficient means to process it or an ability to act on it. Crucial information on clinical effectiveness and standards of care either may not exist or may not have wide acceptance. In this environment, it will be a difficult challenge to determine what health care treatments and procedures are needed, and hence what resource use is appropriate, particularly for Medicare patients, many of whom have multiple comorbidities.

Information is also needed to improve the efficiency of hospitals and health care plans. For example, optimized operating room scheduling can increase capacity without new construction. Although systems-engineering tools for designing and analyzing the operations of such complex systems exist, those tools need information that is best supplied by sophisticated information technology (IT) systems. Where investment in IT systems has lagged, use of those tools may be stymied.

The Commission has often decried the lack of current data on which to make policy judgments. Sources of information for policy analysis on the Medicare Part D prescription drug program and the Medicare Advantage program are not available. Basic data sources such as cost reports and claims need to be improved, and a set of quality measures that reflect evidence-based medicine should be developed. This information development is needed to support provider and beneficiary choices as well as payment policy.

Beneficiaries are now being called on to make complex choices among delivery systems, drug plans, and providers. But information for beneficiaries that could help them choose higher quality providers and improve their satisfaction is just beginning to become available.

Inaccurate payment rates

Within Medicare's payment systems, the payment rates for individual products and services may not be accurate. The basic concept of accuracy is the efficient provider's average cost of furnishing a service. However, it is difficult to observe this price in the market because of the market failures in the current health care system, such as asymmetric information, moral hazard, imperfect risk adjustment, and a lack of competition in some markets.⁴

In markets that are noncompetitive or where competition is based on amenities and technology (i.e., a medical arms race), dominant providers may be able to set prices for private-sector payers well above the efficient providers' costs. Yet, in some of those markets Medicare may be able to set rates that all providers have to accept because of the share of the market Medicare represents. The tension between these two phenomena may mean an accurate payment rate is one just high enough to ensure access for Medicare beneficiaries—whatever its relation to costs or prices paid by other payers. This is a challenging concept to put into operation both because there is a lack of information about access across myriad health care markets and because simply defining what constitutes adequate access to appropriate care is difficult.

Inaccurate payment rates in Medicare's payment systems can lead to unduly disadvantaging some providers and unintentionally rewarding others. For example, under the physician fee schedule, fees are relatively low for primary care and may be too high for specialty care (see Chapter 2). This payment system bias has signaled to physicians that they will be more generously paid for procedural, specialty care, resulting in higher volume growth in this

area. In turn, these signals could influence the supply of providers, resulting in oversupply of specialized services and inadequate numbers of primary care providers which would be an example of perverse incentives in the payment systems.

Poorly targeted technology diffusion

Technology diffuses rapidly across the health care system without sufficient analysis or guidelines that target its use to the patients who will benefit the most. Technologies like prescription drugs, surgeries, and devices—are typically developed to focus on a specific problem, and the evidence supporting their use is generally based on studies using carefully selected patient populations. However, their diffusion can be based on financial incentives rather than efficiency. Manufacturers have strong marketing programs, physicians have incentives (including ownership of imaging equipment) to provide care that generates revenues, and insurance may pay for the technologies with few restrictions. This interaction of insurance coverage and asymmetric information between physicians and patients tends to result in technologies expanding into patient populations where the benefits of therapies are less clear.

Technology diffusion is exacerbated in some cases by Medicare's coverage and payment policies and has clear implications for efficient resource use. The rapid increase in imaging may be an example of modalities valuable for some patients being used on a wider population and in more settings (perhaps exacerbated by the pricing problems mentioned earlier). Our imaging recommendations have called for setting quality standards for providers, improving coding edits, and encouraging payment accuracy and higher quality (MedPAC 2005a).

At the same time that revenue-increasing technologies disseminate rapidly, some innovations in care that improve quality seem to disseminate slowly. For example, checklists to improve quality in intensive care units have been shown to substantially reduce central line infections, yet they are not in use uniformly (Gawande 2007, Provonost et al. 2006). Understanding why the rate of dissemination for beneficial delivery changes is so slow is essential; increasing that rate could have substantial payoffs for the health care system and Medicare. Lack of sufficient financial incentives to adopt these technologies is part of the problem.⁵ Medicare could create clear financial incentives to directly reward hospitals that deliver therapies effectively (e.g., reducing central line infections to target levels) and penalize hospitals that do not. In

addition to direct financial incentives and P4P, another approach could be to charge a comparative-effectiveness entity (which the Commission recommended in its June 2007 report) with developing and disseminating evidencebased information on therapies and processes, such as checklists for controlling central line infections (MedPAC 2007c).

Objectives for reform proposals

To be effective in overcoming these barriers that prevent the Medicare program from achieving value, the Commission has determined that reforms should:

- Promote accountability and care coordination. Providers should be held accountable for the Medicare resources used by the beneficiaries they treat. The autonomy that providers value must be accompanied by accountability to increase value in the Medicare program. Making providers more accountable should improve quality and achieve more efficient resource use. Providers should be encouraged to coordinate care with other providers and break down some of the barriers that current payment systems may create.
- Create better information and tools to use it. Reforms should encourage the collection and dissemination of clinical and resource information and tools to make collection, dissemination, and analysis of the information easier. The reforms should not place an undue burden on CMS, providers, and beneficiaries. Better information combined with changes to the benefit structure could increase equity among beneficiaries and promote more efficient resource use and quality.
- Improve incentives. Reforms should encourage higher efficiency—both lower cost production and higher quality—rather than increases in volume. In addition, a policy should address the problem it is intended to solve efficiently. For example, an intervention should focus on the providers or beneficiaries for which it creates the most value.
- Set accurate payment rates. Reforms should send the correct signals to providers, beneficiaries, and purchasers and avoid unduly favoring some services and beneficiaries with certain characteristics over others.6

It is vitally important that reforms hold true to the basic tenet of the Medicare program—ensuring that beneficiaries have affordable access to needed care. This is the original purpose of the program, even though it may be imperfectly carried out in the current benefit design. As in other health insurance programs, cost sharing is a policy tool to make beneficiaries aware of the resources used in their care and to signal to them which choices of health plans, providers, or treatments may provide better value. (Supplemental insurance that covers cost sharing may make this tool less effective and thus raises other policy issues.) At the same time, a cost-sharing policy should protect beneficiaries from medical bills that exceed their reasonable ability to pay.

Policies should also promote alignment with the private sector. For example, using the same quality measures in public and private P4P programs would greatly simplify and reduce the cost of gathering data. Coordinating programs across all payers would provide greater leverage to influence providers' behavior and at the same time decrease their administrative burden.

Direction for delivery system reform

Without change, the Medicare program is fiscally unsustainable over the long term. In the Commission's view, a fundamental change in the organization and delivery of health care is needed to make care more affordable and of higher quality. However, structural changes may not be enough to achieve sustainability; other actions, such as financing alternatives, may be needed as well, as discussed in Chapter 1 of our March 2007 report (MedPAC 2007a). Many agree that change is needed and that Medicare should seek ways to encourage a more coordinated and clinically integrated care delivery system. But there is less agreement about what such a system should look like and what steps are needed to get there.

Payment system evolution

In previous years, the Commission has recommended tools for increasing efficiency and improving quality within existing Medicare payment systems. These include encouraging the use of information on the comparative effectiveness of medical services and procedures, linking providers' payment to quality measures, measuring resource use and providing feedback, improving payment accuracy within Medicare payment systems, and maintaining sufficient economic pressure on providers to encourage cost control. (The text box, pp. 13-15, provides a detailed description of these tools.) However, in the current Medicare FFS payment system environment, the

benefit of these tools is limited for two reasons. First, they may not be able to overcome the strong incentives inherent in any FFS system to increase volume. Second, paying for each individual service and staying within current payment system silos (e.g., the physician fee schedule or the inpatient prospective payment system) inhibits changes in the delivery system that might result in better coordination across services and lead to efficiencies or better quality across these systems. For example, in current payment systems, there is no reward for providing timely physical therapy instead of expensive imaging for low back pain, even if it is of higher value and leads to greater patient satisfaction (Kaplan 2006).

To increase value for the Medicare program, its beneficiaries, and the taxpayers, we are looking at payment policies that go beyond the current payment system boundaries of scope and time. The new direction contemplated would pay for care that spans across provider types and time and would hold providers accountable for the quality of that care and the resources used to provide it. It would create integrated payment systems that reward value and encourage closer provider integration, which, in turn, would make the use of tools such as P4P even more beneficial. For example, if Medicare held physicians and hospitals jointly responsible for outcomes and resource use, new efficiencies such as standardization of operating room supplies could be pursued. In the longer term, joint responsibility could lead to closer integration across these two parts of the health care delivery system, which in turn could allow more comprehensive measures of quality—including outcome measures—and potentially more powerful P4P programs.

This chapter outlines three delivery system reform concepts: a medical home that provides a beneficiary with a single place to go for primary care and care coordination; bundling hospital and physician payments for a hospital admission; and accountable care organizations (ACOs), which would create incentives to control costs and coordinate care across a large set of providers and allow accountability for care over time. This evolution is illustrated in Figure 1-1 (p. 12). These three concepts are not the end point for reform and further reforms could move the payment systems farther away from FFS and toward systems of providers who accept some level of risk.

One consideration is whether changes in the incentives in the payment systems will lead to changes in the delivery system. We look at evidence of how physicians and hospitals have responded to changing incentives in Chapter 3. Another consideration is whether the current

FIGURE

Direction for payment and delivery system reform

Current fee-for-service payment systems

- Ambulatory surgical centers Clinical laboratory
- Durable medical equipment
- Home health care
- Hospice
- Hospital acute inpatient
- Inpatient rehabilitation facility
- Long-term care hospital
- Outpatient dialysis
- Outpatient hospital
- Physician
- Psychiatric hospital
- Skilled nursing facility

Previously recommended tools

- Using comparative-effectiveness information
- Linking payment to quality
- Reporting resource use
- Bundling individual services within a payment system (e.g., dialysis)
- Creating pressure for efficiency through updates

Potential system changes

- Medical home
- Payments "bundled" across existing payment systems (e.g., hospital and physician around hospitalization)
- Accountable care organization (e.g., physician group practice demo)

benefit design and cost sharing need to be reformed to modify the demand for services, which could reinforce the supply-oriented reforms we discuss here. Changes to benefit design and cost sharing are an important consideration and essential to protect beneficiaries from catastrophic costs, but are outside the scope of this chapter.

Potential system changes

We discuss three concepts that might move the program in the direction of better coordination and more accountable care: the medical home, bundled hospital and physician payments, and ACOs. Implementing any of these concepts will present many thorny issues and will require careful consideration of unintended consequences and possible interactions with the incentives in other payment systems. Nonetheless, because these concepts have the potential to improve quality and reduce cost growth, the Commission considers them worthy of serious study and investigation and recommends pursuing them expeditiously.

Concept 1: Medical home

One concept for achieving greater care coordination, particularly for people with multiple chronic conditions, is the medical home. A medical home is a clinical setting with the capability to improve care coordination and

follow evidence-based guidelines; it serves as the central resource for a patient's ongoing care. Medical homes should have at least the following capabilities:

- furnish primary care (including coordinating appropriate preventive, maintenance, and acute health services);
- conduct care management;
- use health IT for active clinical decision support;
- have a formal quality improvement program;
- maintain 24-hour patient communication and rapid access;
- keep up-to-date records of beneficiaries' advance directives: and
- maintain a written understanding with each beneficiary designating the provider as a medical home.

A medical home in Medicare would coordinate care not only among providers but also between visits (e.g., through e-mail and telephone reminders), encouraging beneficiaries to adhere to care guidelines and track

Tools the Commission has recommended for increasing efficiency and quality

he Commission has devoted much of its work to increasing efficiency and quality in the Medicare program. In this text box, we review our recommendations on encouraging the development and dissemination of comparative-effectiveness information, measuring and rewarding higher quality, measuring resource use, and creating pressure to control costs by constraining payment updates. The Commission's many recommendations on improving payment accuracy are not reiterated here.

Tool 1: Encouraging the use of comparativeeffectiveness information

Comparative-effectiveness analysis compares the clinical effectiveness of a service (drugs, devices, diagnostic and surgical procedures, diagnostic tests, and medical services) with its alternatives. In our June 2007 report, we found that not enough credible, empirically based information is available for health care providers and patients to make informed decisions about alternative services for diagnosing and treating most common clinical conditions (MedPAC 2007c). Many new technologies disseminate quickly into routine medical care with little or no basis for knowing whether they outperform existing treatments. Information about the value of alternative health strategies could improve quality and reduce variation in practice styles.

Although several public agencies conduct comparativeeffectiveness research, it is not their main focus and their efforts are not conducted on a large enough scale. For private-sector groups, conducting this type of research is costly and, when it is made publicly available, the benefits accrue to all users, not just to those who pay for it. Because the information can benefit all users and is a public good, it is underproduced by the private sector; a federal role is necessary to produce unbiased information and make it publicly available.

Consequently, the Commission recommended that the Congress charge an independent entity to sponsor credible research on comparative effectiveness of health care services and disseminate this information to patients, providers, and public and private payers. Specific aspects

of such an entity, including funding and governance, are developed further in Chapter 5 of this report.

The entity's primary mission would be to sponsor, compile, and disseminate studies that compare the clinical effectiveness of a service with its alternatives. The entity would not make decisions on payment or coverage. Payers, including Medicare, could use this information to inform coverage and payment decisions and actively promote more effective treatments. Although cost effectiveness is not the primary mission, the Commission recognized that the entity would produce such analyses in some instances. In the simplest case, cost may be an important factor to consider for two services that are equally effective for a given population. Even when clinical effectiveness differs, it may be important for end users to be aware of costs.

For a complete discussion of the Commission's views on the use of comparative-effectiveness analysis in Medicare, see our June 2007, 2006, and 2005 reports to the Congress (MedPAC 2007c, MedPAC 2006, MedPAC 2005b).

Tool 2: Linking payment to quality

Medicare has a responsibility to ensure that its beneficiaries have access to high-quality care that is of value to the beneficiary and the program. The Commission has made a series of recommendations to tie payments to quality. Measures of quality and guidelines for appropriate care are becoming increasingly available. The Medicare program has been a leading force in efforts to develop and use quality measures, often leading initiatives to publicly disclose quality information, standardize tools for data collection, and give feedback to providers for improvement. CMS has also revised its regulatory standards to require that providers, such as hospitals and home health agencies, have quality improvement systems in place. In addition, CMS is conducting a number of demonstrations to explore whether financial incentives can improve the quality of care.

Nevertheless, Medicare's existing payment systems continue to reward providers for the volume but not the (continued next page)

Tools the Commission has recommended for increasing efficiency and quality (cont.)

quality of the care they provide. Under the incentives in these payment systems to generate volume, poor care that results in complications requiring additional treatment is often rewarded. The same negative or neutral incentives toward quality exist in the private sector. Many private purchasers and health plans are experimenting with mechanisms to counterbalance these forces and reward those who provide high-quality care. Yet they agree that Medicare's participation in these efforts is critical because of its market power (MedPAC 2003).

In a series of reports, we have recommended that Medicare change payment system incentives by basing a portion of provider payment on performance. In our June 2003 report to the Congress, we established criteria for measures to determine whether pay-forperformance (P4P) initiatives were feasible in Medicare and developed guidance on how to administer and fund a P4P program (MedPAC 2003).

In other reports to the Congress, we evaluated available measures and measurement activities and recommended that the Congress establish a quality incentive payment policy for physicians, Medicare Advantage plans, dialysis facilities, hospitals, and home health agencies (MedPAC 2005a, MedPAC 2004a). We also recently recommended linking payments for skilled nursing facilities to quality (MedPAC 2008). The Institute of Medicine echoed our earlier recommendations.

To implement P4P, the Congress must first give the Medicare program the ability to pay providers differentially based on performance. To minimize major disruptions, the program should be funded initially by setting aside a small portion of budgeted payments—for example, 1 percent to 2 percent. The financing of P4P should be budget neutral; all monies set aside should be redistributed to those providers who perform as required.

The Commission will continue to examine P4P initiatives in future work. The complete list of the Commission's recommendations on P4P can be found in our March 2005, March 2004, and June 2003 reports to the Congress (MedPAC 2005a, MedPAC 2004a, MedPAC 2003).

Tool 3: Measuring resource use and providing feedback

In its March 2008 and 2005 reports to the Congress, the Commission recommended that CMS measure physicians' resource use over time and share the results with physicians (MedPAC 2008, MedPAC 2005a). Those who used comparatively more resources than their peers could assess their practice styles and modify them as appropriate, relying on evidence-based research or otherwise recommended clinical practices. Moreover, by linking this information with information on quality of care, Medicare will have a better basis for payment and for improving the value of care beneficiaries receive.

Private payers increasingly measure resource use to help contain costs and improve quality (MedPAC 2004b). Evidence on payers' cost savings resulting from analysis of resource use is mixed and varies depending on how the payer uses the results. Providing feedback on use patterns to physicians alone has been shown to have a statistically significant, but small, downward effect on resource use (Balas et al. 1996, Schoenbaum and Murray 1992). However, when paired with additional incentives, the effect on physician behavior can be considerably larger (Eisenberg 2002). Our recent site visits found considerable interest and effort in measuring resource use by private plans but few documented results thus far.

Medicare's feedback on resource use has the potential to be more successful than previous experience in the private sector. Because Medicare's reports would be based on more patients than private plan reports, they may have greater statistical validity. This, in turn, could lead to greater acceptance from physicians. Confidential feedback of the results to physicians may be sufficient to induce some change. Typically, physicians are highly motivated individuals who strive for excellence and peer approval (Tompkins et al. 1996). If identified by CMS as having an unusually resource-intensive style of practice, some physicians

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Tools the Commission has recommended for increasing efficiency and quality (cont.)

may respond by reducing the intensity of their practice. However, confidential information alone may not be sufficient to have a sustained, large-scale impact on physician behavior. This information may have to be linked to payment to change physician behavior. Over time, information on physician or group resource use and quality could be made available publicly to help beneficiaries make choices and decisions. Doing so would require determining what information would be most useful to beneficiaries and how it could be made available in an understandable form.

The Commission's recommendations on this topic can be found in our March 2005 report to the Congress (MedPAC 2005a). Detailed analysis of resource utilization software is presented in our March 2007 sustainable growth rate report and in our June 2006 report (MedPAC 2007b, MedPAC 2006).

Tool 4: Creating pressure for efficiency through payment updates

One of the Commission's primary roles is to recommend to the Congress how much Medicare feefor-service payment systems should be updated each year. An update is the amount (usually expressed as a percentage change) by which the base payment for all providers in a prospective payment system is changed. The Commission considers a number of factors in its deliberations each year to determine payment adequacy in each sector and how much providers' costs are likely to change. One factor is whether providers in the sector are under enough financial pressure to be efficient and contain costs. If not, costs may be growing faster than the Medicare program can accommodate and the update may be constrained to create the pressure to restrain cost growth.

Although the update is a somewhat blunt tool for constraining cost growth (updates are the same for all providers in a sector, both those with high costs and those with low costs), constrained updates will create more pressure on those with higher costs. Updates as a cost-containment tool can have limited effectiveness, however, when providers continue to have strong incentives to increase service volume even when payment rates are constrained.

their progress. The home would be responsible for the health of the beneficiary over time and would receive a monthly fee for each beneficiary in the medical home program. Chapter 2 provides a more complete description of the medical home concept and the Commission's recommendation to establish a medical home pilot in Medicare. To participate in this pilot, medical homes would need to meet stringent criteria including the capabilities listed above. The Commission recommends that the pilot include a physician P4P program to encourage quality and efficiency. Additionally, the pilot must have clear and explicit thresholds for determining whether it can be expanded into the full Medicare program or be discontinued.

This concept could be expected to improve quality; quality measurement would be an integral part of the design. It might also eventually control resource use, although that would depend on the design and the extent to which the home were held accountable for total Medicare payments for its beneficiaries.

Concept 2: Bundled physician-hospital payments

Under bundled payment, Medicare would pay a single provider entity (composed of a hospital and its affiliated physicians) an amount intended to cover the costs of providing the full range of care needed over the hospitalization episode. With the bundle extending across providers, providers not only would be motivated to contain their own costs but also would have a financial incentive to choose new providers or collaborate with current partners to improve their collective performance. Providers involved in the episode could develop new ways to allocate this payment among themselves. Ideally, this flexibility gives providers a greater incentive to work together and to be mindful of the impact their service use has on the overall quality of care, the volume of services provided, and the cost of providing each service. In the early 1990s, Medicare conducted a successful demonstration of a combined physician-hospital payment for coronary artery bypass graft admissions, showing that costs per admission could be reduced without lowering quality.

In Chapter 4, we explore how the intent of bundling holding providers accountable for care delivered over time and providing an incentive to work together—could be pursued through three concurrent policies:

- reporting to hospitals and physicians about their resource use around hospitalization episodes;
- reducing payments to hospitals with relatively high readmission rates for select conditions, coupled with shared accountability, or gainsharing, between hospitals and physicians; and
- a pilot program of bundled payments.

As we discuss in Chapter 3, hospitals and physicians have responded to the incentives in the current FFS payment systems by implementing various financial and organizational arrangements that enable, encourage, or reward volume growth. History suggests that it may be difficult to structure incentives to encourage physician hospital clinical integration that controls resource use. It will be important to give financial incentives for physicians and hospitals to work together to improve the clinical quality of care (e.g., have lower readmission rates).

Anticipated effects on access, quality, and equity would depend on the design. Controlling resource use around the hospital stay might be feasible, but controlling changes in the number of episodes may be more difficult. Medicare may need to consider additional policies to control per capita admission rates.

Concept 3: Accountable care organizations

The goal of an ACO is to promote accountability for quality and resource use over an extended period of time for a population of patients. Under an ACO, physicians and other providers are encouraged to work together and improve care coordination. Over time, such organizations might control growth in the volume of services provided and improve the quality of their services. This concept could complement medical homes, which in some cases may be too small to support full accountability, and hospital-physician bundling, which creates no incentive to control the volume of initial admissions.

Some existing multispecialty group practices and integrated delivery systems (hospital and physician organizations) might already function as ACOs and could test the concept by volunteering to be accountable for a patient population and be rewarded on their performance. Performance could be measured against the group's

baseline for resource use as is done in the physician group practice demonstration. For example, the ACO would receive FFS payments, some portion of which would be withheld and then returned if they met quality or cost targets. If both quality and cost targets were met, providers could receive the withhold and a share of the cost savings as a bonus. If they met neither quality nor cost targets, CMS could retain the withhold as a penalty. This shared savings approach differs from the capitated payment approach used in the Medicare Advantage (MA) program in that under shared savings the Medicare program retains its ability to set provider (e.g. hospital, physician) payment rates. This is important in markets with a dominant hospital or physician group that can dictate prices to MA plans. To foster the development of these organizations, payment incentives (both rewards and penalties) would need to be strong enough to counter the current incentives in the FFS program. With the correct incentives, ACOs might eventually improve health care quality and value while maintaining access to care.

An alternative approach to voluntary ACOs could be mandatory, virtual ACOs. This approach could be based on the extended hospital medical staff construct we described in our report on the sustainable growth rate last March (MedPAC 2007b). It drew on Elliot Fisher's work, which identifies through claims data a group of physicians that either practice in or treat patients who go to a particular hospital. The performance of that group of physicians can be assessed for the population of patients attributed to them. This concept might be used as a reporting mechanism. CMS could inform physicians what empirically defined virtual group they are part of and what that group's performance is relative to other groups.

Issues to be resolved

As these concepts and other payment system reforms are developed, policymakers will need to resolve several fundamental issues:

How can incentives at the individual physician, group, or joint physician and hospital level be coordinated to obtain best value for the Medicare program? On the one hand, it may be desirable for groups of physicians and hospitals to be jointly responsible for a common set of process and outcomes measures. If they share responsibility for each measure, their incentives would be aligned to work together to improve performance, and the validity of the measure may be increased by the larger number of occurrences. On the other hand, some providers may be reluctant to be held

- responsible for outcomes that are not completely in their control, and making a group rather than an individual the locus of responsibility may dilute the magnitude of individuals' financial incentives to improve their performance. In addition, the form of provider organization may vary by community, further complicating the coordination of measures and incentives at different levels.
- Can payment design accommodate small groups of providers in light of issues such as imperfect risk adjustment and acceptance of risk? Also, will measures of quality and resource use have sufficient statistical significance for small groups of patients?
- What responsibilities do beneficiaries have? Should cost sharing be designed to motivate patients to use certain providers? To what degree should patients be locked in to seeking care from a set of providers once they pick their provider? What information would be most useful to help beneficiaries make better choices and how can it be made available?

These issues will play a role in determining how far and how fast reform can progress. The process of reform should begin as soon as possible, even while certain issues are being resolved, because reform will take many years and Medicare's financial sustainability is deteriorating. The process of fundamental reform is evolutionary, and not knowing the final design should not deter us from beginning. ■

Endnotes

- Although average life expectancy has increased in the United States, a recent study found: "From 1983 to 1999 life expectancy declined significantly in 11 counties for men (by 1.3 y) and in 180 U.S. counties for women (by 1.3 y)" (Ezzati et al. 2008).
- In recent testimony to the Congress, Peter Orszag, Director of the Congressional Budget Office, stated:

In the absence of significant changes in policy, rising costs for health care and the aging of the U.S. population will cause federal spending to grow rapidly. If federal revenues as a share of gross domestic product (GDP) remain at their current level, that rise in spending will eventually cause future budget deficits to become unsustainable. To prevent deficits from growing to levels that could impose substantial costs on the economy, revenues must rise as a share of GDP, or projected spending must fall—or some combination of the two outcomes must be achieved.

For decades, spending on Medicare and Medicaid—the federal government's major health care programs—has been growing faster than the economy, as has health spending in the private sector. The rate at which health care costs grow relative to national income—rather than the aging of the population—will be the most important determinant of future federal spending. The Congressional Budget Office (CBO) projects that under current law, federal spending on Medicare and Medicaid measured as a share of GDP will rise from 4 percent today to 12 percent in 2050 and 19 percent in 2082—which, as a share of the economy, is roughly equivalent to the total amount that the federal government spends today. (Unless otherwise indicated, all years referred to in this testimony are calendar years.) The bulk of that projected increase in health spending reflects higher costs per beneficiary rather than an increase in the number of beneficiaries associated with an aging population (CBO 2007).

- This chapter focuses on changes to Medicare FFS payment systems that would encourage delivery system reform. But the payment system for Medicare Advantage plans also needs reform, as we have previously reported (MedPAC 2007b). Many Medicare Advantage plans have not changed the way care is delivered and often function much like the Medicare FFS program. Paying Medicare Advantage plans appropriately would increase pressure on them to compete to find efficiencies in care delivery and improve quality.
- "Moral hazard" is the patient's decision to purchase health care services that have less value to the patient than the full cost of the care. Patients may choose to purchase care that they value less than the care's cost when their insurer is partially or fully paying the cost of care. For a discussion of why some of the additional health care services purchased due to insurance reflect an improvement in social welfare and some do not, see Nyman (2004).
- When complications arise, Medicare often pays more for the care than it would for the basic diagnosis related group without complications. Even if Medicare will not pay for a particular complication, often the payment system will recognize another complication and increase payment.
- One way to obtain information for setting payment rates is through the market, when conditions allow. CMS is starting to use competitive bidding to set prices—for example, for durable medical equipment. Medicare is also using competitive bidding in the Medicare Advantage program and in Part D. Those programs show the importance of designing a bidding system that elicits competitive bids that provide the best value for the Medicare program. Where markets support competitive bidding (e.g., many providers, relatively uniform products), it could lead to more accurate rates and eventually better resource use if inaccurate prices are driving inappropriate use.

References

Anderson, G. F., B. K. Frogner, R. A. Johns, et al. 2006. Health care spending and use of information technology in OECD countries. Health Affairs 25, no. 3: 819-831.

Anderson, G. F., U. E. Reinhardt, P. S. Hussey, et al. 2003. It's the prices stupid: Why the United States is so different from other countries. Health Affairs 22, no. 3: 89-105.

Balas, E., S. Borch, G. Brown, et al. 1996. Effect of physician profiling on utilization: Meta-analysis of randomized clinical trials. Journal of Internal Medicine 11, no. 10: 584-590.

Congressional Budget Office. 2007. Testimony on the long-term budget outlook before the Committee on the Budget, U.S. House of Representatives. Washington, DC: CBO. December 13.

Davis, K., and C. Schoen, 2007. State health system performance and state health reform. Health Affairs Web Exclusives (September 18): w664-w666.

Eisenberg, J. M. 2002. Physician utilization: The state of research about physicians' practice patterns. Medical Care 40, no. 11 (November): 1016-1035.

Ezzati, M., A. B. Friedman, S. C. Kulkami, et al. 2008. The reversal of fortunes: Trends in county mortality and cross-county mortality disparities in the United States. PLoS Medicine 5, no. 4 (April). http://www.plosmedicine.org.

Fisher, E., D. Wennberg, T. Stukel, et al. 2003a. The implications of regional variations in Medicare spending. Part 1: The content, quality, and accessibility of care. Annals of Internal Medicine 138, no. 4 (February 18): 273–287.

Fisher, E., D. Wennberg, T. Stukel, et al. 2003b. The implications of regional variations in Medicare spending. Part 2: Health outcomes and satisfaction with care. Annals of Internal Medicine 138, no. 4 (February 18): 288-298.

Gawande, A. 2007. The checklist. Annals of medicine. New Yorker, December 10.

Institute of Medicine. 2001. Crossing the quality chasm: A new health system for the 21st century. Washington, DC: National Academy Press.

Kaplan, G. 2006. Transforming the delivery of health care— Better, faster and more affordable. Presentation to MedPAC. September.

McGlynn, E. A., S. M. Asch, J. Adams, et al. 2003. The quality of health care delivered to adults in the United States. New England Journal of Medicine 348, no. 26 (June 26): 2635–2645.

Medicare Payment Advisory Commission. 2008. Report to the Congress: Medicare payment policy. Washington, DC: MedPAC.

Medicare Payment Advisory Commission. 2007a. Report to the Congress: Medicare payment policy. Washington, DC: MedPAC.

Medicare Payment Advisory Commission. 2007b. Report to the Congress: Assessing alternatives to the sustainable growth rate system. Washington, DC: MedPAC.

Medicare Payment Advisory Commission. 2007c. Report to the Congress: Promoting greater efficiency in Medicare. Washington, DC: MedPAC.

Medicare Payment Advisory Commission. 2006. Report to the Congress: Increasing the value of Medicare. Washington, DC: MedPAC.

Medicare Payment Advisory Commission. 2005a. Report to the Congress: Medicare payment policy. Washington, DC: MedPAC.

Medicare Payment Advisory Commission. 2005b. Report to the Congress: Issues in a modernized Medicare program. Washington, DC: MedPAC.

Medicare Payment Advisory Commission. 2004a. Report to the Congress: Medicare payment policy. Washington, DC: MedPAC.

Medicare Payment Advisory Commission. 2004b. Report to the Congress: New approaches in Medicare. Washington, DC: MedPAC.

Medicare Payment Advisory Commission. 2003. Report to the Congress: Variation and innovation in Medicare. Washington, DC: MedPAC.

Nyman, J. 2004. Is 'moral hazard' inefficient? The policy implications of a new theory. Health Affairs 23, no. 5: 194-199.

Provonost, P., D. Needham, S. Berenholtz, et al. 2006. An intervention to decrease catheter-related bloodstream infections in the ICU. New England Journal of Medicine 355, no. 26 (December): 2725-2732.

Schoen, C., K. Davis, S. K. H. How, et al. 2006. U.S. health system performance: A national scorecard. Health Affairs Web Exclusives (September 20): W457–W475.

Schoenbaum, S., and K. Murray. 1992. Impact of profiles on Medicare practice. Conference on profiling no. 92-2. Physician Payment Review Commission, paper no. 4: 72–102.

Shea, K. K., A. Shin, and K. Davis. 2007. Health care opinion leaders' views on the quality and safety of health care in the United States. Data brief. New York: Commonwealth Fund. July. Tompkins, C., S. S. Wallack, S. Bhalotra, et al. 1996. Bringing managed care incentives to Medicare's fee-for-service sector. Health Care Financing Review 17, no. 4 (Summer): 43-63.

Wennberg, J. E., E. S. Fisher, and J. S. Skinner. 2002. Geography and the debate over Medicare reform. Health Affairs Web Exclusives Suppl. (July-December): w96-w114.